

PIERRE
AUGER
OBSERVATORY

Status of Safety Efforts at Pierre Auger Observatory

Rafael Coll- CSP, CSHM



Status of Safety Efforts at Pierre Auger Observatory

- Project Manager request to ESH-Section Feb 2002
- Two Visits- May 2002/Nov 2002
 - Nov 2002 during collaboration meeting
- Safety Professional (CSP) and an Industrial Hygienist (CIH) May 2002



Status of Safety Efforts at Pierre Auger Observatory

May 2003 visit

- ESH Program
- Examined Physical structures
- Project Safety Management





Status of Safety Efforts at Pierre Auger Observatory

- Physical Structures

- Los Leones
Fluorescence Bldg

Construction activities

Outdoor water tank

Outdoor pit



Status of Safety Efforts at Pierre Auger Observatory

- Surface Detectors
 - Pre-Assembly
 - Deployment
 - Filling



Status of Safety Efforts at Pierre Auger Observatory

- Lidar System

- Class 4 laser system
- 2 recommendations made
- No collaborators present to explain the system to safety personnel
- Further evaluation of final design





Status of Safety Efforts at Pierre Auger Observatory

- Galpon
 - Building/storage annex and abandoned house
 - Liner test area
 - Materials storage
 - House to be used in the future



Status of Safety Efforts at Pierre Auger Observatory

- Machine shop
 - Each machine evaluated for hazards and compliance with machine guarding standards
 - All machines in compliance
 - Clean and well organized shop
 - Qualified machine operator on duty.



Status of Safety Efforts at Pierre Auger Observatory

- De-ionized Water plant
 - Evaluated by industrial hygienist
 - No concerns with this operation
 - Only concern is cleaning of the 60m³ cistern (confined space)



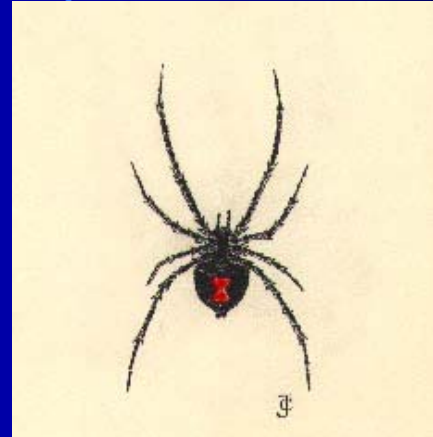
Status of Safety Efforts at Pierre Auger Observatory

- Data Processing and Analysis Room
 - Only considerations are of an ergonomics nature
 - Glare
 - Repetitive motion injuries (mouse use)
 - Ergonomic chairs
 - Breaks
 - Exercises



Status of Safety Efforts at Pierre Auger Observatory

- Biological Hazards and other Vectors
 - Argentinian Dept of Natural Resources
 - Black widow spider
 - Brown recluse spider
 - Hydatid Disease- larvae of tapeworms
 - Brucellosis



Status of Safety Efforts at Pierre Auger Observatory

● Training

- Provided in Spanish
- Meets OSHA standards
- Experienced operator assigned by management as evaluator
- Program mirrors Fermilab program



Status of Safety Efforts at Pierre Auger Observatory

- November 2002 Visit

- Communications Group
- Surface Detector Group-Receiving
- Photo-multiplier tube installation
- Assembly area safety survey





Status of Safety Efforts at Pierre Auger Observatory

- Services Planned for the future
 - Re-write of PAO ESH Manual
 - ESH Handbook
 - Review of work procedures by collaborators-Ongoing



Status of Safety Efforts at Pierre Auger Observatory

- Plan for July 03 Visit
 - Four training courses for argentinian workers
 - Follow up on recommendations from prior visits
 - Eval of medical services in the community
 - Any other services requested by management

